AP Statistics Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Ch. 22 Classwork Date: \_\_\_\_\_\_\_\_ Block\_\_\_

1. Great Britain has a great literary tradition that spans centuries. One might assume, then, that Britons read more than citizens of other countries. Some Canadians, however, feel that a higher percentage of Canadians than Britons read. A recent Gallop Poll reported that 863 of 1004 randomly sampled Canadians read at least one book in the past year, compared to 817 of 1009 randomly sampled Britons. Do these results confirm a higher reading rate in Canada?
2. Test an appropriate hypothesis and state your conclusion.
3. What would a Type I error be in this context?
4. What would a Type II error be in this context?
5. What would power be in this context?
6. Interpret your p-value (from letter a) in context.
7. Find a 99% confidence interval for the difference in the proportion of Britons and Canadians who read at least one book in the last year. Interpret your interval. (you don’t need to check conditions- they were checked in #1).